

## WEST Search History

DATE: Monday, December 02, 2002

| <u>Set Name</u><br>side by side                          | <u>Query</u>            | <u>Hit Count</u> | <u>Set Name</u><br>result set |
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| <i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR</i> |                         |                  |                               |
| L6   | L3 and PDZ              | 4                | L6                            |
| L5   | L4 and PDZ adj 6 domain | 140788           | L5                            |
| L4   | L1 and FAS              | 3056             | L4                            |
| L3   | L2 and FAs              | 260              | L3                            |
| L2   | L1 and microarray       | 2312             | L2                            |
| L1   | array                   | 523775           | L1                            |

END OF SEARCH HISTORY

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| NEWS         | 1  |        | Web Page URLs for STN Seminar Schedule - N. America   |
| NEWS         | 2  | Apr 08 | "Ask CAS" for self-help around the clock  |
| NEWS         | 3  | Apr 09 | BEILSTEIN: Reload and Implementation of a New Subject Area  |
| NEWS         | 4  | Apr 09 | ZDB will be removed from STN  |
| NEWS         | 5  | Apr 19 | US Patent Applications available in IFICDB, IFIPAT, and IFIUDB  |
| NEWS         | 6  | Apr 22 | Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS   |
| NEWS         | 7  | Apr 22 | BIOSIS Gene Names now available in TOXCENTER  |
| NEWS         | 8  | Apr 22 | Federal Research in Progress (FEDRIP) now available   |
| NEWS         | 9  | Jun 03 | New e-mail delivery for search results now available  |
| NEWS         | 10 | Jun 10 | MEDLINE Reload  |
| NEWS         | 11 | Jun 10 | PCTFULL has been reloaded   |
| NEWS         | 12 | Jul 02 | FOREGE no longer contains STANDARDS file segment  |
| NEWS         | 13 | Jul 22 | USAN to be reloaded July 28, 2002;<br>saved answer sets no longer valid   |
| NEWS         | 14 | Jul 29 | Enhanced polymer searching in REGISTRY  |
| NEWS         | 15 | Jul 30 | NETFIRST to be removed from STN   |
| NEWS         | 16 | Aug 08 | CANCERLIT reload  |
| NEWS         | 17 | Aug 08 | PHARMAMarketLetter(PHARMAML) - new on STN   |
| NEWS         | 18 | Aug 08 | NTIS has been reloaded and enhanced   |
| NEWS         | 19 | Aug 19 | Aquatic Toxicity Information Retrieval (AQUIRE)<br>now available on STN   |
| NEWS         | 20 | Aug 19 | IFIPAT, IFICDB, and IFIUDB have been reloaded   |
| NEWS         | 21 | Aug 19 | The MEDLINE file segment of TOXCENTER has been reloaded   |
| NEWS         | 22 | Aug 26 | Sequence searching in REGISTRY enhanced   |
| NEWS         | 23 | Sep 03 | JAPIO has been reloaded and enhanced  |
| NEWS         | 24 | Sep 16 | Experimental properties added to the REGISTRY file  |
| NEWS         | 25 | Sep 16 | Indexing added to some pre-1967 records in CA/CAPLUS  |
| NEWS         | 26 | Sep 16 | CA Section Thesaurus available in CAPLUS and CA   |
| NEWS         | 27 | Oct 01 | CASREACT Enriched with Reactions from 1907 to 1985  |
| NEWS         | 28 | Oct 21 | EVENTLINE has been reloaded   |
| NEWS         | 29 | Oct 24 | BEILSTEIN adds new search fields  |
| NEWS         | 30 | Oct 24 | Nutraceuticals International (NUTRACEUT) now available on STN   |
| NEWS         | 31 | Oct 25 | MEDLINE SDI run of October 8, 2002  |
| NEWS         | 32 | Nov 18 | DKILIT has been renamed APOLLIT   |
| NEWS         | 33 | Nov 25 | More calculated properties added to REGISTRY  |
| NEWS EXPRESS |    |        | October 14 CURRENT WINDOWS VERSION IS V6.01,<br>CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),<br>AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002 |
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FILE COVERS 1907 - 28 Nov 2002 VOL 137 ISS 23  
FILE LAST UPDATED: 28 Nov 2002 (20021128/ED)

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=> s PDZ domain  
980 PDZ  
185188 DOMAIN  
L1 669 PDZ DOMAIN  
(PDZ (W) DOMAIN)

=> s l1 and array  
61715 ARRAY  
L2 7 L1 AND ARRAY

=> d l2 1-7 au so py ab

L2 ANSWER 1 OF 7 CA COPYRIGHT 2002 ACS  
AU Kirikoshi, Hiroyuki; Katoh, Masaru  
SO International Journal of Oncology (2002), 20(6), 1183-1187  
CODEN: IJONES; ISSN: 1019-6439  
PY 2002  
AB GIPC1/GIPC, GIPC2, and GIPC3 are a family of central PDZ-domain proteins. GIPC1/GIPC interacts with TGF.beta. type III receptor, receptor tyrosine kinase TrkA, integrin .alpha.6A subunit, and GTPase-activating protein RGS-GAIP, while Xenopus homolog of human GIPCs interacts with Frizzled-3 (FZD3) class of WNT receptor. Here, we

Shin'ichi

SO Proceedings of the Japan Academy, Series B: Physical and Biological  
Sciences (2000), 76B(2), 22-27  
CODEN: PJABDW; ISSN: 0386-2208

PY 2000

AB .alpha.1-Syntrophin, a member of dystrophin-assocd. proteins, is expressed at the sarcolemma and at perivascular astrocytes, and participates in protein-protein interactions through its **PDZ domain**. Aquaporin-4 (AQP4) is the predominant water channel protein in the brain, and also expressed at the sarcolemma of fast-twitch muscle fibers. AQP4 is concd. in orthogonal **array** particles (OAPs), and its expression has been reported to be decreased at the sarcolemma of dystrophin-deficient mdx mice. We examd. whether .alpha.1-syntrophin targets AQP4 at the sarcolemma. Immunohistochem. showed that AQP4 is absent at the sarcolemma in .alpha.1-syntrophin knockout mice and that its expression is also lost from the perivascular astrocyte endfeet. On the other hand, expression of AQP4 is not decreased at the sarcolemma of the knockout mice in the neonatal stage. Moreover, AQP4 is expressed in lung, stomach, and kidney of wild-type and .alpha.1-syntrophin null mice. These results show that .alpha.1-syntrophin is a key mol. to localize AQP4 to the sarcolemma of mature fast myofibers and astrocyte endfeet, but AQP4 is targeted to the plasma membrane by different mols. in lung, stomach, and kidney.

L2 ANSWER 6 OF 7 CA COPYRIGHT 2002 ACS

IN Bartel, Paul L.; Tavtigian, Sean V.

SO PCT Int. Appl., 107 pp.

CODEN: PIXXD2

PY 1999

1999

1999

2002

2000

2002

AB The present invention is directed to the MMSC1 gene, its protein product and the use of the protein to (i) detect mutant MMAC1 proteins, (ii) screen for drugs which can be used for suppressing tumor growth and (iii) identify proteins which interact with the MMAC1 gene or are involved in the tumor suppression pathway of the MMAC1 gene. Yeast two-hybrid screening indicated that MMAC1 binding to a protein named MMSC1. MMSC1 has eleven PDZ domains and one or more of these domains interacts specifically with the three C-terminal amino acids of MMAC1. Specifically, **PDZ domain** no. 7 interacts with MMAC1. Since MMSC1 contains 11 PDZ domains and interacts with MMAC1, a known amino acid suppressor having a region of homol. with protein tyrosine phosphatases, MMSC1 acts as a scaffolding protein in a common biochem. pathway with MMAC1. These characteristics indicate that the interaction between MMAC1 and MMSC1 is required for the tumor suppressor activity of MMAC1.

L2 ANSWER 7 OF 7 CA COPYRIGHT 2002 ACS

AU Xu, Xian-Zhong Shawn; Choudhury, Atish; Li, Xiaoling; Montell, Craig

SO Journal of Cell Biology (1998), 142(2), 545-555

CODEN: JCLBA3; ISSN: 0021-9525

PY 1998

AB The rapid activation and feedback regulation of many G protein signaling cascades raises the possibility that the crit. signaling proteins may be tightly coupled. Previous studies show that the **PDZ domain** contg. protein INAD, which functions in Drosophila vision, coordinates a signaling complex by binding directly to the light-sensitive ion channel, TRP, and to phospholipase C (PLC). The INAD signaling complex also includes rhodopsin, protein kinase C (PKC), and calmodulin, though it is not known whether these proteins bind to INAD. In the current work, we show that rhodopsin, calmodulin, and PKC assoc. with the signaling complex by direct binding to INAD. We also found that a 2nd ion

channel, TRPL, bound to INAD. Thus, most of the proteins involved directly in phototransduction appear to bind to INAD. Furthermore, we found that INAD formed homopolymers and the homomultimerization occurred through 2 PDZ domains. Thus, we propose that the INAD supramol. complex is a higher order signaling web consisting of an extended network of INAD mols. through which a G protein-coupled cascade is tethered.

=> d his

(FILE 'HOME' ENTERED AT 08:46:33 ON 02 DEC 2002)

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L1 669 S PDZ DOMAIN  
L2 7 S L1 AND ARRAY

=> s l1 and tripeptide

9209 TRIPEPTIDE  
L3 3 L1 AND TRIPEPTIDE

=> d l3 1- 3 ti au so py ab

YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 3 CA COPYRIGHT 2002 ACS  
TI Identification of mNET1 as a Candidate Ligand for the First **PDZ Domain** of MAGI-1  
AU Dobrosotskaya, Irina Y.  
SO Biochemical and Biophysical Research Communications (2001), 283(4), 969-975  
CODEN: BBRCA9; ISSN: 0006-291X  
PY 2001  
AB This paper reports the identification of a Rho family nucleotide exchange factor termed mNET1 as a candidate-interacting partner for the first **PDZ domain** of MAGI-1, a membrane-assocd. guanylate kinase with inverted arrangement of protein-protein interacting modules. mNET1 was identified in a yeast two-hybrid screen and has a consensus **tripeptide** for **PDZ domain** binding at its extreme carboxy-terminus. In addn. to this sequence, a cluster of basic residues located near the carboxy terminus is essential for the binding. The interaction of the first **PDZ domain** of MAGI-1 with mNET1 was documented using a variety of biochem. methods. (c) 2001 Academic Press.

L3 ANSWER 2 OF 3 CA COPYRIGHT 2002 ACS  
TI The molecular interaction of Fas and FAP-1. A **tripeptide** blocker of human Fas interaction with FAP-1 promotes Fas-induced apoptosis  
AU Yanagisawa, Junn; Takahashi, Motoo; Kanki, Hiroaki; Yano-Yanagisawa, Hiroko; Tazunoki, Tetsushi; Sawa, Eiji; Nishitoba, Tsuyoshi; Kamishohara, Masaru; Kobayashi, Eiichi; Kataoka, Shiro; Sato, Takaaki  
SO Journal of Biological Chemistry (1997), 272(13), 8539-8545  
CODEN: JBCHA3; ISSN: 0021-9258  
PY 1997  
AB Fas (APO-1/CD95), which is a member of the tumor necrosis factor receptor superfamily, is a cell surface receptor that induces apoptosis. A protein tyrosine phosphatase, Fas-assocd. phosphatase-1 (FAP-1), that was previously identified as a Fas binding protein interacts with the C-terminal 15 amino acids of the regulatory domain of the Fas receptor. To identify the minimal region of the Fas C-terminal necessary for binding to FAP-1, we employed an in vitro inhibition assay of Fas/FAP-1 binding using a series of synthetic peptides as well as a screen of random peptide libraries by the yeast two-hybrid system. The results showed that the C-terminal three amino acids (SLV) of human Fas were necessary and sufficient for its interaction with the third PDZ (GLGF) domain of FAP-1. Furthermore, the direct cytoplasmic microinjection of this **tripeptide** (Ac-SLV) resulted in the induction of Fas-mediated

apoptosis in a colon cancer cell line that expresses both Fas and FAP-1. Since t(S/T)X(V/L/I) motifs in the C termini of several other receptors have been shown to interact with **PDZ domain** in signal transducing mols., this may represent a general motif for protein-protein interactions with important biol. functions.

L3 ANSWER 3 OF 3 CA COPYRIGHT 2002 ACS  
TI Crystal structure of a **PDZ domain**  
AU Cabral, Joao H. Morais; Petosa, Carlo; Sutcliffe, Michael J.; Raza, Sami; Byron, Olwyn; Poy, Florence; Marfatia, Shirin M.; Chishti, Athar H.; Liddington, Robert C.  
SO Nature (London) (1996), 382(6592), 649-652  
CODEN: NATUAS; ISSN: 0028-0836  
PY 1996  
AB PDZ domains (also known as DHR domains or GLGF repeats) are .apprx.90-residue repeats found in a no. of proteins implicated in ion-channel and receptor clustering, and the linking of receptors to effector enzymes. PDZ domains are protein-recognition modules; some recognize proteins contg. the consensus C-terminal **tripeptide** motif S/TXV with high specificity. Other PDZ domains form homotypic dimers: the **PDZ domain** of the neuronal enzyme nitric oxide synthase binds to the **PDZ domain** of PSD-95, an interaction that has been implicated in its synaptic assocn. This report describes the crystal structure of the third **PDZ domain** of the human homolog of the Drosophila disks-large tumor-suppressor gene product, DlgA. It consists of a 5-stranded antiparallel .beta.-barrel flanked by 3 .alpha.-helixes. A groove runs over the surface of the domain, ending in a conserved hydrophobic pocket and a buried arginine; this may be the binding site for the C-terminal peptide.

L3 ANSWER 3 OF 3 CA COPYRIGHT 2002 ACS  
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=> d his

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FILE 'CA' ENTERED AT 08:46:40 ON 02 DEC 2002

L1 669 S PDZ DOMAIN  
L2 7 S L1 AND ARRAY  
L3 3 S L1 AND TRIPEPTIDE

=> log y

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